



-Billings District Office  
424 Morey Street  
PO Box 20437  
Billings, MT 59104-0437

December 14, 2012

Stillwater County Commissioners  
PO Box 970  
Columbus, MT 59019-0970

Subject: Speed Limit Recommendations  
P-78/ MT 78  
Absarokee - Columbus



The Department has completed a speed zone study at the subject location. Attached is the study report and a recommendation for the speed zone through the subject location; ready for presentation to the Montana Transportation Committee for approval. Please review the report and reply in writing that the County concurs or does not concur.

The new speed zone recommendations must be accepted or rejected as a whole. If the County chooses to reject the new speed limit recommendation, The Department will take no further action and the roadway will retain its existing speed limits as approved by previous Commissions and current State law. If the County approves the recommendation but desires modifications, the County may lobby the Transportation Commission to modify the recommendations at the meeting of the Commission. The District will notify the County of the date, time and location of the Commission meeting.

We would appreciate all written comments be made within 60 days of this letter. If you have any questions, please contact District traffic, Stan Jonutis, at 657-0240.

Respectfully,

Stefan Streeter, P.E.  
District Administrator - Billings

Attachment: Speed zone study

32p78szdr:smj

copies: Traffic File

MASTERFILE  
COPY



Montana Department of Transportation

PO Box 201001

Helena, MT 59620-12002 DEC 14 AM 9 43

**Memorandum**

RECEIVED MT DEPT  
OF TRANSPORTATION

To: Stefan Streeter, P.E. – Billings District Administrator

From: *DCB* Danielle C. Bolan, P.E. - Traffic Operations Engineer

Date: December 4, 2012

Subject: Speed Limit Recommendation  
MT 78 – Absarokee to Columbus

Please present the following information to Local officials for review and comment. Inform them that we would prefer to receive all comments in writing within the next sixty days. Their comments along with the Department's final recommendations will be presented to the Montana Transportation Commission for action.

With the completion of project STPP 78-2(9), the remainder of MT 78 from Absarokee to the Yellowstone River Bridge in Columbus has been reconstructed to modern design standards. In 2001 prior to reconstruction a speed limit investigation was conducted along the rural portion of the corridor having the statutory 70 mph speed limit in place. It was prompted by public safety concerns in that the statutory 70 mph speed limit was not appropriate for the roadway design features, surface conditions and the travel speeds.

From that investigation effort and input from local officials a consensus was arrived at that a 55 mph – 60 mph speed limit configuration was agreed upon to be in effect until such time the roadway was reconstructed. Part of the understanding was that once construction was complete a new study would be conducted to evaluate the speed limits. The results of the study would be presented to local officials, as well to the Montana Transportation Commission for action.

Currently the speed limit is 55 mph beginning north of Absarokee at milepost 33.4 and continuing north to a point just beyond the intersection with Red Barn Lane near milepost 35.9. At this location the speed limit increases to 60 mph. The 60 mph speed limit continues to milepost 45.6 where it transitions into the special speed limit configuration leading into the community of Columbus. Both Absarokee and Columbus have previously approved special speed limit configurations in place.

The first portion of the study area, all of the 55 mph speed zone segment and approximately 1-mile into the 60 mph speed zone was most recently

reconstructed under project STPP 78-2(9) with completion date in 2012. The remainder of the 60 mph speed zone segment had been reconstructed back in 2008 under project STPP 78-2(10). The primary typical section consists of two 12-foot travel lanes with 3-foot shoulders. Whereas, previously the roadway consisted of two 11-foot travel lanes with little or no surfaced shoulder area.

The entire study area is rural in character as MT 78 follows the general alignment of the Stillwater River Valley. Horizontal alignment is curvilinear along much of the corridor with the surrounding environment used for agricultural purposes. Average annual daily traffic volume ranges from 2,090 north of Absarokee to 3,140 approaching the city of Columbus.

### **Crash History**

On the portion reconstructed in 2008 the crash history was reviewed for a three year period from January 1, 2009 to December 31, 2011. During this period there were 21 single vehicle crashes, one rearend crash and one other multiple vehicle crash reported. Crash rate is 1.12 crashes per million vehicle miles traveled. Conflicts with animals (wild) were listed as the primary contributing factor in 16 of the 21 reported crashes. There was no relationship between the two multiple vehicle crashes.

With reconstruction completed in 2012 along the remainder of the study area, there has not been a sufficient time period in which to report on the crash experience.

### **Travel Speeds**

Automatic traffic counters were used to sample directional travel speeds at twelve locations to develop a travel speed profile within the existing 55 mph and 60 mph speed zones.

<b>Location</b>	<b>85<sup>th</sup> % Speed</b>	<b>10 mph Pace &amp; Percentage</b>
Near Montana Ave. in Absarokee 35 mph Speed Zone	42 mph Northbound 40 mph Southbound	(33 mph – 43 mph) 67% (30 mph – 40 mph) 70%
North End of Absarokee 45 mph Speed Zone	56 mph Northbound 55 mph Southbound	(45 mph – 55 mph) 64% (42 mph – 52 mph) 61%
Milepost 33.7 55 mph Speed Zone	64 mph Northbound 62 mph Southbound	(54 mph – 64 mph) 68% (54 mph – 64 mph) 71%
Milepost 34.8 – Near Beaver Cr. 55 mph Speed Zone	65 mph Northbound 63 mph Southbound	(53 mph – 63 mph) 70% (53 mph – 63 mph) 74%
Milepost 36.0 – Near Red Barn Ln. 60 mph Speed Zone	64 mph Northbound 64 mph Southbound	(56 mph – 66 mph) 73% (56 mph – 66 mph) 76%
Milepost 38.0 60 mph Speed Zone	64 mph Northbound 70 mph Southbound	(56 mph – 66 mph) 77% (59 mph – 69 mph) 73%

Milepost 40.0 60 mph Speed Zone	65 mph Northbound 65 mph Southbound	(56 mph – 66 mph) 76% (56 mph – 66 mph) 76%
Milepost 42.0 - At Joe Hill Cr. Rd. 60 mph Speed Zone	67 mph Northbound 65 mph Southbound	(59 mph – 69 mph) 77% (56 mph – 66 mph) 76%
Milepost 44.0 - At Winkler Farm Rd. 60 mph Speed Zone	64 mph Northbound 64 mph Southbound	(56 mph – 66 mph) 74% (56 mph – 66 mph) 71%
At "Reduced Speed Ahead" sign Near Columbus - 60 mph Zone	62 mph Northbound 61 mph Southbound	(51 mph – 61 mph) 70% (51 mph – 61 mph) 65%
Milepost 45.9 45 mph Speed Zone	52 mph Northbound 54 mph Southbound	(42 mph – 52 mph) 70% (45 mph – 55 mph) 68%
At Palladium Place 35 mph Speed Zone	34 mph Northbound 35 mph Southbound	(24 mph – 34 mph) 73% (27 mph – 37 mph) 72%

### Conclusions and Recommendations

Both the 85<sup>th</sup> percentile speeds and the upper limit of the pace were quite consistent from one location to another throughout the 55 mph and 60 mph speed zones. We also observed a large proportion of the traffic stream, typically around 70 percent or more in some locations traveling within the 10-mph pace indicating a uniform flow in traffic.

In this post construction period we did not observe an increase in the desired travel speeds from that documented in 2001, but more uniformity with less variation previously attributed to geometric constraints and driver discomfort. We also observed with one exception in the southbound lane at milepost 38.0 that the 85<sup>th</sup> percentile speeds were below the statutory 70 mph speed limit for rural state primary routes. Based on the results of the spot speed samples and a review of the available crash record history we recommend the following 65 mph speed limit. In order to carry this recommendation forward to the Montana Transportation Commission for approval we will need local official written support of the following speed limit recommendation.

**A 65 mph speed limit beginning at the end of the 45 mph speed zone near milepost 33.4 north of Absarokee and continuing northeast to the beginning of the 45 mph speed zone approaching Columbus near milepost 45.6, an approximate distance of 12.2 miles.**

Truck speed limits will remain at 60 mph daytime and 55 mph nighttime.

DCB:DRB:TRF:P78(absarokee-columbus)\_rpt

attachments

Copies R.A. Peterson  
D.R. Bailey  
E-file